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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/764,046	01/17/2001	Masayuki Atokawa	P/1071-1244	5678

7590 11/18/2003

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EXAMINER
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LEE, BENNY T

ART UNIT	PAPER NUMBER
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2817

DATE MAILED: 11/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES DEPARTMENT OF COMMERCE  
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☐ This application has been examined ☒ Responsive to communication filed on 30 July 2003 ☒ This action is made final.

A shortened statutory period for response to this action is set to expire Three (3) month(s), Two from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- |   |   |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-948.                  |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449.                 | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152 |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474.     | 6. <input type="checkbox"/> _____   |

Part II SUMMARY OF ACTION

1. ☒ Claims 1, 2, 6-9, 14-16 are pending in the application.  
Of the above, claims 6-8, 14-16 are withdrawn from consideration.
2. ☒ Claims 3-5, 10-13 have been cancelled.
3. ☐ Claims \_\_\_\_\_ are allowed.
4. ☒ Claims 1, 2, 9 are rejected.
5. ☐ Claims \_\_\_\_\_ are objected to.
6. ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on \_\_\_\_\_. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice re Patent Drawing, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed \_\_\_\_\_, has been ☐ approved; ☐ disapproved (see explanation).
12. ☐ Acknowledgement is made of the claim for priority under U.S.C. 119. The certified copy has ☐ been received ☐ not been received  
☐ been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

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Claims 6-8, 14-16 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made without traverse in Paper No. 7.

The disclosure is objected to because of the following informalities: In the replacement paragraph to page 17, line 8, note that "are"-- (following "D12") should be deleted as being unnecessary. Appropriate correction is required.

The drawings are objected to because of the following: In Figs. 5, 6, 7, 8, 9, 11, 12, note that "capacitors" (C<sub>s1</sub>, C<sub>s2</sub>) need to be respectively labeled; In fig. 13, reference label --12c-- needs to be provided. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Applicant's arguments filed 30 July 2003 have been fully considered but they are not persuasive.

With respect to the drawing objections set forth above, applicants' arguments have been noted, but have been found unpersuasive. Note that the emphasis of the above drawing objections comes about because at each of the above noted instances, the reference labels in question have been explicitly described relative to the corresponding figure description and thus should be correspondingly labeled in the drawings. For example, in Fig. 5, the reference labels (C<sub>s1</sub>, C<sub>s2</sub>) have been explicitly described at page 19, lines 14, 19, which is a part of the Fig. 5 description and thus Fig. 5 needs to include these reference labels. The same applies to the other indicated

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drawing figures set forth in the drawing objection as described at other locations throughout the specification. However, if applicants' do not believe that adding these reference labels is warranted, then the specification should be accordingly amended to resolve this problem.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371 © of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claim 1 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Walker et al.

Walker et al in Fig.2 discloses a dielectric block filter (10 in fig. 1) having resonators (48, 26) disposed within the dielectric block. The block has most side surfaces coated with a conductive material (i.e. metallization ground layer 30). Conductive pattern (e.g. 40) constitute input/output electrodes while separated electrode (50) constitute a capacitively coupled regulating element for resonators (48, 26). Note that electrode (50) has a voltage controlled reactance element (i.e. PIN diode 50) and a circuit element (i.e. resistor 54) are connected between the separated electrode (50) and the ground metallization (30). In operation, a control voltage is coupled from a voltage control circuit (not shown) through the resistor to the PIN diode thereby

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vary the voltage characteristic of the PIN diode and thus adjust the capacitive coupling between electrode (50) and resonance hole (48). Note that the effect of such an adjustment is to change the resonant frequency of the resonator associated with resonator (48), as described in the abstract.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker et al and Yorita ('002), of record, taken in combination.

Note that both Yorita ('002) discloses a dielectric block filter with a stepped outer surface having plural separated electrodes (28a, 28b) for coupling to the resonance holes disposed thereon. However, Yorita fails to disclose such separated electrodes are coupled to a voltage responsive reactance element.

As described above in a previous rejection, Walker et al also discloses a separated electrode on a side surface for capacitive coupling to resonance holes and further includes its connection to a voltage control reactance element (52) responsive to an applied voltage control to

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selective adjust the capacitive coupling, but does not disclose a stepped dielectric block filter or plural separated electrodes.

Accordingly, it would have been obvious in view of the references, taken as a whole, to have added voltage controlled reactances, as taught by Walker, to separated electrodes (28a, 28b) of Yorita. Moreover, as a consequence of such a modification, such reactance elements would have necessarily been disposed within the dielectric block filter. Such a modification would have been considered obvious since it would have imparted the advantageous benefit of providing an adjustable capacitive coupling to a previously fixed capacitive coupling, thereby suggesting the obviousness of such a combination.

Applicant's arguments with respect to claims 1-4, 5, 9 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

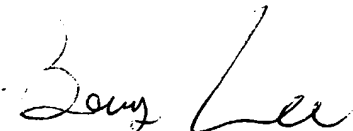
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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sroka discloses a dielectric filter having variable voltage controlled elements associated with the resonators of the dielectric filter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benny Lee whose telephone number is (703) 308 4902.

  
BENNY L. LEE  
PRIMARY EXAMINER  
ART UNIT 2817

B. Lee  
November 14, 2003